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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|---------------|----------------------|-------------------------|-----------------|
| 10/807,091 | 03/23/2004 | Darryl A. Bourgoyne | H055010.0035US1 | 3844 |
| 75 | 90 11/03/2006 | | EXAM | INER |
| Richard D. Fladung | | | DANG, HOANG C | |
| STRASBURGER & PRICE, LLP 1404 McKinney, Suite 2200 | | | ART UNIT | PAPER NUMBER |
| Houston, TX 77010 | | | 3672 | |
| | | | DATE MAILED: 11/03/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|------------------|--|--|--|--|
| Office Action Summan | 10/807,091 | BOURGOYNE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Hoang Dang | 3672 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failture to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>30 June 2006</u> . | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This action is non-final. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>43,44,46,48-54,56-61,64-68,70-78 and 88-98</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6) Claim(s) 43,44,46,48-54,56-61,64-68, 70-78 and 88-98 is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | |
| 10)⊠ The drawing(s) filed on <u>30 June 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal Pa | | | | | |
| Paper No(s)/Mail Date <u>8/25/2006</u> . | 6) Other: | | | | | |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 30, 2006 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claim 90 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Harrison (US 3,638,721) (see figure 3) or Williams et al (US 5,662,181) (see figure 3).

It is noted that a preamble, an intended use, or an "adapted" phrase is given no patentable weight in an apparatus claim. The system or housing of Harrison or Williams et al is capable of being positioning above a portion of a marine riser as recited.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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5. Claims 89, 90 and 92-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over the April 1998 Offshore Drilling with Light Weight Fluids Joint Industry Project Presentation (reference II on PTO-1449 filed 5/7/2004) (herein after "Reference II) in view of Harrison (US 3,638,721) or vice versa.

Reference II discloses a method of drilling an offshore well with lightweight fluids. On page C-9, it discloses the use of a rotating head at the top of a riser without telescopic joint.

Reference II does not disclose the structure of the rotating head. Harrison '721 discloses a method and apparatus for drilling an offshore well from a floating vessel as that of Reference II. However, Harrison teaches using a rotating head 22 including a housing 42 that rotatably supports a removable seal member 40 and has an opening 60 for returning drilling fluid to the floating vessel through a flexible pipe 35. The rotatable seal member 40 is movable with an inner member 41 to sealably engage a rotatable drill string. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use of a rotating head having a structure as claimed in the Reference II in view of the teaching of Harrison.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a riser in Harrison and locate the rotating head 22 above the riser as claimed in view of the teaching of Reference II.

With respect to claims 89 and 92, the "inner member", "radially outwardly disposed outer member", "bearings", "seal" and "housing" as recited do not distinguish from elements (41), (43), (44a), (40) and (42) respectively of the rotating control head of Harrison. It is noted that the uppermost portion of bearing element 41 is located radially inward of the radially outer portion of retainer plate 43.

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As further for claim 89, it is noted none of the bearings 44a that are introduced in line 8 are in contact with the housing 42 as recited in lines 11-12.

6. Claims 43, 44, 48-54, 56-61, 64-68, 70-78, 88 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reference II in view of Harrison '721 or vice versa as applied to claims 89, 90 and 92-98 above, and further in view of Leach (US 4,813,495).

Reference II, as modified by Harrison (or vice versa), discloses the invention as claimed except that the rotating head of Harrison does not include a "pressure relief mechanism". Leach teaches providing a rotating head with a pressure relief mechanism to permit the drilling mud returns to be dumped in the event of an emergency (column 3, lines 30-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the rotating head of Reference II as modified by Harrison or vice versa with a pressure relief mechanism in view of the teaching of Leach for the advantage pointed out above.

As for claims 66, 67, 71, 72 and 90, Leach also teaches providing valves 52, 54 & 58 to the rotating head so that the flow of mud returns can be effectively controlled (column 3, lines 12-16).

7. Claims 44, 73, 75 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reference II in view of Harrison '721 or vice versa as applied to claims 89, 90 and 92-98 above, and further in view of Leach (US 4,813,495) as applied to claims 43, 44, 48-54, 56-61, 64-68, 70-78, 88 and 91 above, and further in view of Streich et al (US 5,314,015).

The pressure relief mechanism 59 of Leach is not disclosed as a rupture disk. However, it is well known in the art to use a rupture disk to relieve pressure because of its simplicity as evidenced by Streich et al (see column 17, lines 12-16). To provide Reference II as modified by

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Harrison or vice versa and Leach with a pressure relief means 59 in the form of a rupture disk would have been obvious in view of the teaching of Streich et al for the advantage pointed out above.

8. Claim 46, 89, 92 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reference II in view of Williams et al (US 5,662,181) or Murray et al (US 4,175,186).

Reference II discloses a method of drilling an offshore well with lightweight fluids. On page C-9, it discloses the use of a rotating head at the top of a riser without telescopic joint.

Reference II does not disclose the structure of the rotating head. However, either Williams et al '181 (see figure 3) or Murray et al '186 (see figures 1-7) disclose a rotating head including a housing that rotatably supports a removable assembly that includes an inner member, a radially outwardly disposed outer member, a plurality of bearings interposed between the inner and outer members in order to facilitate removably mounting the bearing assembly in the housing while drilling or servicing the well (column 2, lines 36-42 in Williams et al or column 6, lines 1-4 in Murray et al). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use of a rotating head having a structure as claimed in the Reference II in view of the teaching of Williams et al for the advantages pointed out above.

Double Patenting

9. Claims 43, 44, 48-54, 56-61, 64-68, 70-78 and 88 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of U.S. Patent No. 6,913,092 or claims 1-30 of U.S. Patent No. 6,263,982 in view of Leach (US 4,813,495). Leach teaches providing a rotating head with a pressure relief mechanism to permit

advantage pointed out above.

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returns to be dumped in the event of an emergency (column 3, lines 30-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the invention as defined by claims 1-34 of U.S. Patent No. 6,913,092 or claims 1-30 of U.S. Patent No. 6,263,982 with a pressure relief mechanism in view of the teaching of Leach for the

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- 10. Claims 89-98 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of U.S. Patent No. 6,913,092 or claims 1-30 of U.S. Patent No. 6,263,982. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 89-98 are broader and therefore read on the invention as defined by claims 1-34 of U.S. Patent No. 6,913,092 or claims 1-30 of U.S. Patent No. 6,263,982.
- 11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Drawings

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12. Figure 3A should be designated by a legend such as -- Prior Art-- because only that which

is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR

1.121(d) are required in reply to the Office action to avoid abandonment of the application. The

replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR

1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted

by the examiner, the applicant will be notified and informed of any required corrective action in

the next Office action. The objection to the drawings will not be held in abeyance.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hoang Dang whose telephone number is 571-272-7028. The

examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hoang Dang Primary Examiner Art Unit 3672